

### REMARKS

The applicant has carefully considered the Office action dated December 2, 2004 and the references it cites. By way of this Response, claims 1 and 4 have been cancelled without prejudice to their further prosecution. In view of the following remarks, all pending claims are in condition for allowance. Accordingly, favorable reconsideration of all pending claims is respectfully requested.

As an initial matter, the applicant notes that the election of species requirement was made Final in the Office action of December 2, 2004. Because that election of species requirement is in error, the applicant has concurrently filed a Petition to overturn the election requirement. This response assumes that the petition has been granted in that the non-elected claims are being pursued.

Turning to the Office action of December 2, 2004, the Office action rejected claims 1 and 4 as being unpatentable over Farkas et al., U.S. Patent 5,710,069 and Cerni et al., U.S. Patent 6,275,290. Claims 1 and 4 have been cancelled without prejudice to their further prosecution. Therefore, the rejections based on Farkas et al. and Cerni et al. are moot.

Independent claim 2 is patentable over the Farkas and Cerni references. Independent claim 2 recites an apparatus comprising, among other things, a diluent solution supply unit to supply diluent solution to reduce a concentration of particles in the slurry. In contrast, Farkas expressly states:

The method described herein provides single-particle detection in a *concentrated or undiluted suspension or mixture* and provides an accurate

determination of the tail portion of the distribution of the particles in the mixture. *The present method does not require mixture dilution so that the colloidal properties of the mixture are not altered during the measurement of particle size.* The method is also less susceptible to contamination because the *mixture is not diluted.* Furthermore, the method provides in-line and real-time data for monitoring particles within a moving or flowing mixture.

(col. 6 ll. 55-65)(emphasis added). It is well established law that that, “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention, then the teachings of the references are not sufficient to render the claims prima facie obvious.” MPEP § 2143.01, citing, In re Ratti, 270 F.2d 810 (C.C.P.A. 1959). Since Farkas is plainly directed to undiluted mixtures, as a matter of law, it would not be obvious to modify Farkas to include a diluent solution supply unit to supply diluent solution to reduce a concentration of particles in the slurry as recited in claim 2. Accordingly, claim 2 and all claims depending therefrom are patentable over the proposed Farkas/Cerni combination.

Independent claim 5 is also patentable. Claim 5 recites supplying a diluent solution to reduce a concentration of particles of the slurry. As discussed above, Farkas cannot be modified to supply such a diluent solution. Accordingly, claim 5 and all claims depending therefrom are patentable over Farkas and Cerni, whether taken alone or in combination.

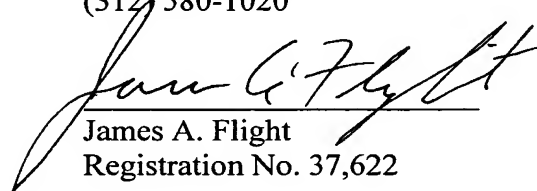
In view of the foregoing, it is respectfully submitted that all pending claims are in condition for allowance.

The Commissioner is hereby authorized to refund any overpayment and/or to charge any deficiency in the amount enclosed or any additional fees which may be required during the pendency of this application under 37 CFR 1.16 or 1.17 to Deposit Account No. 50-2455. A copy of this paper is enclosed.

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